COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

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POULTRY DISEASES

Excerpts from 1922 Annual Reports of State and County Extension Agents.



This circular is one of a series issued by the Office of Cooperative Extension Work as a part of its informational service to State and county extension workers and was compiled at the request of L. E. Card, Professor of Poultry Husbandry, University of Illinois, Urbana. The material contained herein is not released for printed publication.

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Pag	ge		Page
Alabama		Maine	
Madison County	2	Extension poultryman	5
California		Michigan	
Extension poultryman	2	Van Buren County	5
Marin County	3	New Mexico	4000
Connecticut	197	Roosevelt County	6
Extension poultryman	3	San Miguel County	
Delaware	100	Ohio	
Sussex County	3	Fulton County	6
Indiana		Rhode Island	
Assistant county agent leader	3	Newport County	7
Kansas		Texas	
Wilson County	7	Lampasas County	7
Kentucky		Vermont	
Grayson County	4	Caledonia County	7

Alabama

Sorehead. - The third poultry campaign this fall was to get rid of sorehead. We had a scourge of it in this county, and scarcely a flock escaped. For days, the advisers to clubs went from farm to farm showing club members how to doctor their fowls. The agent's Ford became a traveling drug store for home remedies for chickens with sorehead. We now have the disease practically under control. - Evelyn Peyton, Home Demonstration Agent, Huntsville, Madison County.

California

Coccidiosis control project. - The object of this project was to demonstrate the University of California's methods of coccidiosis control as the disease occurred, and to procure state-wide information regarding the results obtained. Results were as follows:

Demonstrations held	16
Chicks treated	25,570
Age of chicks when epidemic started days	35
Deaths before treatment (6 days)per cent	65
Deaths after treatment (5 days)	35
arson Extension Poultryman College of Agriculture	Rerkelev

- R. B. Carson, Extension Poultryman, College of Agriculture, Berkeley.

*No attempt is made to cite all references to poultry diseases in this circular. Only selected extracts showing typical methods employed and results secured in a number of States are included. Owing to differences in the terminology used in various States and to other local conditions, the information contained in this circular should be reviewed by the State subjectmatter specialist concerned before incorporating any part of it in the extension plans for the State.

Coccidiosis control. - The poultry committee of the Novato center advocated the university method of coccidiosis control. Only two flocks were treated, and in each case the disease was immediately checked. One person had lost 500 chickens during the previous week; the first day after using the university treatment she lost but 25, the second day 4, and the third day none. After this, 15 poor ones were lost. The other poultry owner had lost 800 when he began our method of control but lost only 149 afterwards. - M. B. Boissevain, County Agent, San Rafael, Marin County.

Connecticut

Bradication of bacillary white diarrhea. - During the period covered by this report, 30 flocks representing 5,153 chickens have been tested. Of these, 670 fowls had the disease. At the close of the testing work, a list of all breeders that have had their flocks tested is published and sent to all prospective buyers of eggs and chicks. By this means it is possible to circulate a large amount of disease-free stock throughout the State.

Chicken pox treatment. - The chicken pox treatment reported last year has not been continued due to the varied results obtained by poultrymen using the locally made vaccine. During the latter part of this year, chicken pox infection has been more widely spread in the State than ever before. A large number of flocks, at the recommendation of this institution, have been vaccinating with the ASL avian bacterium supplied by the American Scientific Laboratories of Chicago. Although some poultrymen report very satisfactory results from the use of this vaccine, others are not enthusiastic. Chicken pox treatment is work that must be carried on, since the loss from the disease in this State in 1922 amounted to many thousands of dollars. - Roy E. Jones, Extension Foultryman, Connecticut Agricultural College, Storrs.

Delaware

Vaccination for roup and chicken pox. - As the poultry industry is increasing, diseases are becoming more prevalent each year, especially roup and chicken pox. Excellent cooperation has been given by the biological department of the University of Delaware, and Dr. C. C. Palmer has furnished vaccine, free of charge, to all poultrymen who have made application for it. Nineteen days of the county agent's time were spent during the year in assisting farmers in vaccinating their flocks and in giving demonstrations on the administering of the serum. From experience we find that it is best to vaccinate chickens in September and early October before they are put into the laying house for the winter. Good results have been obtained where sanitary precautions have been taken, the houses properly disinfected, and the premises kept clean. - M. C. Vaughn, County Agent, Georgetown, Sussex County.

Indiana

Coccidiosis. - Coccidiosis, a disease heretofore practically unknown in La Porte County, appeared this year in the flocks of many poultrymen. In

who lost 40 chicks in one morning after he had been losing chicks for days, placed catechu in all drinking water accessible to his poultry. The result was that only 2 chicks were dead on the following morning. The disease apparently was not confined to baby chicks. One man reported that he lost several hundred which had reached the springer size, and others reported light or heavy losses. Considerable publicity has been given the matter in an attempt to acquaint all the poultrymen with the control method.

Bacillary white diarrhea. - One of the most progressive developments in the poultry industry of Pulaski County is the testing of breeding flocks to detect carriers of bacillary white diarrhea. This comes after three years of keeping poultry records in the county. Now that a large number of flocks have demonstrated their egg-producing abilities, their owners are going further, and through cooperation with the veterinary division of Purdue University are taking blood samples from each hen and breeding cockerel in the flook. These are sent to the university where each individual sample is given the agglutination test for bacillary white diarrhea. The division then sends the besults back to the owners and a copy to the county agent. The latter is present when infected hens are shipped, in order to make affidavit to the fact that the reactors have been thrown out of the flock. Those who buy hatching eggs from these flocks next spring can thus be assured of getting eggs that will hatch chicks free from infectious diarrhea. - T. R. Johnston, Assistant County Agent Leader, Purdue University, La Fayette.

Kansas

Roup. - Roup has been the most prevalent poultry disease in the county this year. In one instance, a flock of 275 hens was vaccinated by our local veterinarian with good results. - C. C. Grandfield, County Agent, Fredonia, Wilson County.

Kentucky

Use of bichloride of mercury. - The poultry flocks of Grayson County have suffered from limberneck, chicken pox, roup, and other diseases this summer. The county agent recommended the use of bichloride of mercury in the drinking water, and this brought good results. W. R. Green of the Pine Knob community reported that he was losing all his chickens from limberneck. The county agent told him to cut the weeds around the henhouse, to burn or bury any rotten meat that he could find, and then to give the chickens I tablet of bichloride of mercury in I gallon of drinking water, for 4 days. Mr. Green said that he got a complete cure, and that the remedy was better than anything he ever used. C. R. Gaither, of Church, reports a cure of limberneck from the same treatment. Bichloride of mercury has been given also to flocks having roup and chicken pox, and in all cases the results have been good. - R. W. Scearce, County Agent, Leitchfield, Grayson County.

Maine

White diarrhea testing. - That bacillary white diarrhea is spreading among the poultry in Maine is indicated by its toll in the death rate of chickens in many flocks. The day-old chick business is doubtless one of the chief agencies in the spread of this disease, owing to the fact that

chicks from diseased flocks carry the disease and rapidly spread it. During the spring of 1921, this disease was causing considerable loss to a number of commercial poultrymen in various sections of the State and especially in Waldo County. After a consultation with several of these men, it was realized that something should be done to assist them in checking the disease. Steps were therefore taken to provide means for having hens tested for white diarrhea by the method known as the "agglutination test" of a blood sample from the hens used as breeders. The method was first employed by Dr. L. F. Rettga of the Schoffield Scientific School, New Haven, Conn., and has been successfully used in Connecticut and New Hampshire in combating the disease.

Plan of work. - Arrangements were made with P. I. Fitts of the New Hampshire College of Agriculture to come to Orono early in June and teach Doctor Russell and Miss Chandler, of the department of bacteriology, and Mr. Gardner, poultry instructor, the details of the manipulation of sampling hens and conducting the test. Plans were made to do the testing during August and September, before the opening of college. In order to bring this work to the attention of the poultry keepers, publicity was given in the State papers, and a circular letter enclosing an outline of the plan was sent to the community and county poultry project leaders of the farm bureaus and to county agents. The plan was printed in the farm bureau news in most counties, and the county agents were furnished application blanks. The work was started August 8 and continued until the time college opened about the middle of September. A few flocks were tested during the college year. Of the hens tested there is a very high average percentage of infection. This is accounted for by the fact that in most of the flocks tested there had been considerable loss of chickens. Only three flocks showed a negligible amount of disease. The poultry specialist has assisted in the actual work only to the extent of taking 161 samples while doing other extension work in these communities. It is planned to contimue the work on a more extensive scale and to work toward the development of flocks which are free from the disease. Several poultrymen already have asked to have their hens tested. - O. M. Wilbur, Extension Poultryman. College of Agriculture, University of Maine, Orono.

Michigan

Prevention of white diarrhea. - Considerable time and effort during the year were devoted to the prevention and control of diseases in chickens. A large number of flock owners were interested by the agent in the matter of having their breeders individually blood-tested for white diarrhea. One poultryman alone tested more than 1,500 breeding hens last winter. The result was that the chicks sent to farmers from his hatchery lived and grew much better than they did in 1921, when the agent was repeatedly called upon to look after trouble in chicks secured from him. - W. C. Eckard, County Agent, Paw Paw, Van Buren County,

New Mexico

Roup and sorehead vaccine. - The use of roup and sorehead vaccine has been tried in 8 demonstrations, at which 31 persons were present and 2,400 hens and young chickens were vaccinated. The demonstrations have not yet been completed but indications are that use of the vaccine will prove profitable. The flocks infected with roup that have been vaccinated

have become practically free from the disease. Although severely affected fowls have not been helped by its use, complete cures have been made in most cases. It has been found that the mixed bacterin is the only effective thing to use and that a double injection with a seven days interval is preferable to a single injection. As a result of the work and that carried on in a similar way by the local veterinarian, a number of poultrymen have ordered vaccine and done their own vaccinating. - R. R. Will, County Agent, Portales, Roosevelt County.

Results of vaccination. - Since chicken pox and roup have been the worst diseases that the farmers have had to contend with, the county agent decided that it would be well worth while to try vaccination. It was first tried on his own flock, and the result was so good that the remedy was recommended to others. One flock of 35 turkeys, several of which were nearly dead, was vaccinated, and after two weeks the owner sent word that the only one that had died had been nearly dead when vaccinated. In all, there have been 1,000 chickens vaccinated, with a loss by death of less than 5 per cent. Not only has vaccination stopped the deaths among the chickens but it has put vigor into the flocks, and flocks that have not been producing for a long time have began laying in a few weeks after the treatment. Six demonstrations were given on vaccination. Where it was impossible for the county agent to do the work, he lent his vaccination outfit to the farmers so that they could do it themselves. - L. F. Jones, County Agent, East Las Vegas, San Miguel County.

Ohio

Vaccination for roup. - Three flocks of poultry were vaccinated for roup with the following results: At first, 15 fowls were treated, of which 2 died, while the others recovered in a short time. Those treated had very severe cases and had been separated from the rest of the flock. Fifteen more were then vaccinated, with the same results. Finally, the entire flock of 215 fowls was treated. They were in very bad condition, with 12 to 15 dying each day. After the vaccination 10 died, but the others recovered quickly. In the flocks treated, the fowls were affected with all phases of the disease, including chicken pox, diphtheria, and wet roup. The vaccine is supposed to be a preventive, but gave good results as a remedy. Vaccine is now being used extensively throughout the county for roup. Some local veterinarians have made the vaccination of poultry a part of their practice.-Roy A. Cave, County Agent, Wauseon, Fulton County.

Rhode Island

Chicken pox innoculation. - Four men have tried chicken pox innoculation. On one farm the fowls had been dying at the rate of one a day for a week. Vaccine prepared from scabs collected in Tiverton was administered and the outbreak stopped. Only one other chicken became sick. On two places there were no signs of an outbreak, but the flocks were given preventive treatment. Such treatment is beneficial, but better results can be obtained if innoculation is delayed till signs of the disease appear and is then done with material made from scabs collected in this section.

One poultryman in the county asked for help in testing his breeding stock for white diarrhea. Blood samples of over 100 of his chickens were sent to Kingston for the agglutination test, but the percentage of diseased fowls was not so bad as had been expected. - J. E. Knott, jr., County Agent, Newport, Newport County.

Texas

Treatment of turkeys. - During the year I treated chickens for roup, chicken pox, canker, limberneck, and gapes, that is, treated them for prevention or for cure. Roup and chicken pox gave trouble during the first part of the year, but several flocks were successfully treated with remedies suggested by me. During the early fall there was an outbreak of canker of diptheria among both chickens and turkeys. Turkeys were affected by the disease more than chickens. One farmer had six large young gobblers which were nearly dead, and he called on me for assistance. I went to his place twice to assist in treating them, and we saved all but one. After this I gave instructions for treating other flocks, and the disease was soon stamped out. During the spring I gave instructions for treating several flocks of turkeys for blackhead which attacks the turkeys here occasionally. The treatment of this disease is more for prevention than for cure. We were able to cure the cases reported before many turkeys were lost. - J. C. Griffin, County Agent, Lampasas, Lampasas County.

Vermont

Use of sirup of ipecac for blackhead. - The use of sirup of ipecac in controlling the blackhead of turkeys gave very good results. Whenever a turkey showed signs of sickness, it was caught and a few drops of the sirup poured down its throat. No turkeys were lost by disease. - M. V. Barnes, County Agent, St. Johnsbury, Caledonia County.